

D1
1 47. (Amended) [A disk drive, comprising:
2 a disk having a plurality of concentric tracks for storing data, the tracks including
3 a first track having a first data pattern with a first frequency, a second data pattern with a
4 second frequency that is higher than the first frequency,] The disk drive of claim 87,
5 wherein the first track includes an AGC field and a burst field, and [wherein] one of the
6 first and second data patterns is located in one of the AGC and burst fields;
7 a head for reading data from and writing data to the disk; and
8 a detection circuit that determines whether the head is within an acceptable flying
9 height range in response to the first and second data patterns].

D2
1 53. (Amended) The disk drive of claim 47, wherein the first data pattern is
2 located in the AGC [ACG] field and the second data pattern is located in the burst field.

D3
1 55. (Amended) The disk drive of claim 54, wherein the first track includes an A
2 burst field and a B burst field between the first and second data patterns.

D4
1 57. (Amended) [A disk drive, comprising:
2 a disk having a plurality of concentric tracks for storing data, the tracks including
3 a first track having a data pattern;
4 a head for reading data from and writing data to the disk; and]
5 The disk drive of claim 87, wherein the [a] detection circuit [that] determines
6 whether the head is within an acceptable flying height range in response to a peak count
7 of a detection signal based on a [the] data pattern that includes at least one of the first and
8 second data patterns.

D5
Sub E17
1 61. (Amended) The disk drive of claim 57, wherein detection circuit includes a
2 transition detector[, and a counter, [and a memory] and an output of the transition
3 detector is coupled to an input of the counter.

26
1 64. (Amended) The disk drive of claim 63, wherein the detection circuit includes
2 a memory, and the memory provides a calibration value corresponding to a data storage
3 location on the track that is accessed during one of a read and write operation while the
4 data pattern is read to provide the detection signal.

07
1 67. (Amended) [A disk drive, comprising:
2 a disk having a plurality of concentric tracks for storing data, the tracks including
3 a first track having a random data pattern;
4 a head for reading data from and writing data to the disk; and]
5 The disk drive of claim 87, wherein the [a] detection circuit [that] determines
6 whether the head is within an acceptable flying height range in response to a peak count
7 that is based on a [the] random data pattern that includes at least one of the first and
8 second data patterns and is substantially proportional to the flying height of the head.

78
1 71. (Amended) ~~The disk drive of claim 67, wherein detection circuit includes a~~
2 ~~transition detector[,]~~ and a counter, [and a memory] and an output of the transition
3 detector is coupled to an input of the counter.

09
1 74. (Amended) The disk drive of claim 73, wherein the detection circuit includes
2 a memory, and the memory provides a calibration value corresponding to a data storage
3 location on the track that is accessed during one of a read and write operation while the
4 random data pattern is read to provide the detection signal.

010
1 77. (Amended) [A disk drive, comprising:
2 a disk having a plurality of concentric tracks for storing data, the tracks including
3 a first track having a linearly increasing frequency data pattern;
4 a head for reading data from and writing data to the disk; and]

D10
5 The disk drive of claim 87, wherein the [a] detection circuit [that] determines
6 whether the head is within an acceptable flying height range in response to a linearly
7 increasing frequency data pattern that includes at least one of the first and second data
8 patterns.

D11
1 81. (Amended) ~~The disk drive of claim 77, wherein detection circuit includes a~~
2 ~~transition detector[,]~~ and a counter, [and a memory] and an output of the transition
3 detector is coupled to an input of the counter.

D12
1 84. (Amended) ~~The disk drive of claim 83, wherein the detection circuit includes,~~
2 a memory, and the memory provides a calibration value corresponding to a data storage
3 location on the track that is accessed during one of a read and write operation while the
4 linearly increasing frequency data pattern is read to provide the detection signal.

D13 Sub
Ex 7
1 94. (Amended) ~~The disk drive of claim 87, wherein detection circuit includes a~~
2 ~~transition detector, a counter, and a memory,~~ an output of the transition detector is
3 coupled to an input of the counter, and outputs of the counter and the memory are coupled
4 to an output of the detection circuit.

D14 Sub
Ex 7
1 104. (Amended) ~~The disk drive of claim 97, wherein detection circuit includes a~~
2 ~~transition detector, a counter, and a memory,~~ an output of the transition detector is
3 coupled to an input of the counter, and outputs of the counter and the memory are coupled
4 to an output of the detection circuit.

D15
1 124. (Amended) ~~The disk drive of claim 122, wherein the region of the first track~~
2 ~~contains [three]~~ four ~~servo burst fields between the first and second data patterns.~~